

1. A method of providing a graft vessel for a patient, comprising:
a) dissecting the graft vessel from connective tissue adjacent to the graft vessel to provide a free portion of the graft vessel;
b) positioning an active electrode of an electrosurgical probe in at least close proximity to a first position of the free portion of the graft vessel; and thereafter
c) upon application of a high frequency voltage between the active electrode and a return electrode, transecting the graft vessel at the first position via localized molecular dissociation of graft vessel components.

2. The method of claim 1, further comprising:
d) positioning the active electrode of the electrosurgical probe in at least close proximity to a second position of the free portion of the graft vessel; and thereafter
e) upon application of a high frequency voltage between the active electrode and the return electrode, transecting the graft vessel at the second position via localized molecular dissociation of the graft vessel components.

3. The method of claim 2, further comprising:
f) prior or concurrently to said steps c) or e), delivering an electrically conductive fluid to the active electrode such that the electrically conductive fluid provides a current flow path between the active electrode and the return electrode.

4. The method of claim 1, further comprising:
g) prior to said step a), accessing at least a portion of the graft vessel by removing at least a portion of an overlying tissue which overlies the graft vessel.

5. The method of claim 4, wherein said step g) comprises:
h) positioning the active electrode in at least close proximity to the overlying tissue; and
i) after said step h), applying a high frequency voltage between the active electrode and the return electrode, wherein the overlying tissue is ablated via localized molecular dissociation of overlying tissue components.

6. The method of claim 5, further comprising:

j) prior to or during said step i), delivering an electrically conductive fluid to the active electrode such that the electrically conductive fluid provides a current flow path between the active electrode and the return electrode.

7. The method of claim 5, further comprising:

k) during said step i), moving the active electrode against a surface of the overlying tissue to create an incision in the overlying tissue.

8. The method of claim 4, wherein the overlying tissue is a sternum, an intercostal space, or the skin of the patient.

9. The method of claim 7, further comprising effecting hemostasis of the overlying tissue at the incision.

10. The method of claim 2, wherein transecting the graft vessel at the first position or the second position comprises moving the active electrode with respect to the graft vessel.

11. The method of claim 1, wherein said step a) comprises:

l) positioning the active electrode of the electrosurgical probe in at least close proximity to the connective tissue adjacent to the graft vessel; and

m) after said step l), applying a high frequency voltage between the active electrode and the return electrode, wherein at least a portion of the connective tissue adjacent to the graft vessel is ablated via localized molecular dissociation of connective tissue components.

12. The method of claim 11, further comprising:

n) prior to or during said step m), providing an electrically conductive fluid between the active electrode and the return electrode.

13. The method of claim 11, wherein during said steps c) and m) the graft vessel and the connective tissue, respectively, are exposed to a temperature in the range of from about 40° C to 70° C.

14. The method of claim 1, wherein said steps a) through c) are performed in a minimally invasive procedure or with laparoscopic access.

15. The method of claim 1, wherein the method is performed intercostally.

16. The method of claim 1, wherein the method comprises a coronary artery bypass graft (CABG) procedure.

17. The method of claim 1, wherein said steps a) through c) are performed in conjunction with a median sternotomy.

18. The method of claim 1, wherein the graft vessel is a saphenous vein or an internal mammary artery.

19. The method of claim 1, wherein the high frequency voltage has a frequency in the range of from about 50 kHz to about 500 kHz.

20. The method of claim 1, wherein the high frequency voltage is in the range of from about 10 volts RMS to about 500 volts RMS.

21. The method of claim 11, wherein said step m) comprises effecting hemostasis of the connective tissue.

22. The method of claim 1, wherein the active electrode consists essentially of a single blade electrode having an active edge and first and second blade sides.

23. The method of claim 5, wherein the active electrode consists essentially of a single blade electrode having an active edge and first and second blade sides, the overlying tissue comprises the sternum, said step i) generates a high current density in the region of the active edge such that an incision is formed in the sternum, and at least one of the first and second blade sides engages the incised sternum, wherein hemostasis of the incised sternum is effected.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (408) 736-0224.

Respectfully submitted,



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